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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,618	03/17/2004	Jens Staecker	2003 P 50524 US	4580
48154	7590	05/03/2006	EXAMINER	
SLATER & MATSIL LLP 17950 PRESTON ROAD SUITE 1000 DALLAS, TX 75252			NGUYEN, ANTHONY H	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/802,618	STAECKER ET AL.	
	Examiner	Art Unit	
	Anthony H. Nguyen	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 22-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 22-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>06/30/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's election of Group I, claims 1-13 and 22-31 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 6, 22, 23, 28 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen (US 2002/0170880)

With respect to claims 1, 22 and 23, Chen teaches an arrangement for transferring information/structure to a substrate 8 which is positioned and fixed on a chuck 26, a stamp 62 positioned over the substrate having elevated structure 66 serving as information/structure to be transferred to a patterning layer 6 on the substrate and a pair of alignment marks 68,70. The elevated structures of the stamp are physically contacted with the patterning layer of the substrate as shown in the step 88 (Chen, Fig.4). With respect to claims 5 and 6, the stamp 62 is fixed to a three-dimensionally positionable stamp mount 60 (Chen, Fig.3 and paragraph [0036]).

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,3, 7-13, 30, 32-39 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Chen (US 2002/0170880) in view of Farrar et al. (US 2002/0076896).

With respect to claims 2 and 34, Chen teaches an arrangement for transferring information/structure having substantially the structure as recited. Chen does not teach the alignment marks which are metal marks. Farrar et al. teaches the alignment marks which are the metal marks 200 formed in the substrate 10 for aligning the substrate 10 so that a trench 210 can be formed in the substrate. In view of the teaching of Farrar et al., it would have been obvious to one of ordinary skill in the art to modify the alignment marks of Chen by substituting the metal marks as taught by Farrar et al. to permit more precise control the position of a stamp over the desired position on a substrate or a wafer. With respect to claims 7,8, 30 and 31, the use of a chuck having a device for accepting/transferring the substrate from /to a handler is conventional. With respect to claims 9-12, 32,33, 37 and 38, the selection of the desired material, the dimension and the size of the substrate for the arrangement would be obvious through routine experimentation in order to get best possible patterns quality on a patterning

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layer. With respect to claim 13 the use of a photolithographic process in conjunction with an etching process is well known in the art.

Claims 4 and 24-27 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Chen (US 2002/0,170,880) in view of Sreenivasan et al. (US 6,916,584).

Chen teaches an arrangement for transferring information/structure having substantially the structure as recited. Chen does not teach the use of laser with the alignment marks. The use of optical device such as a camera or a laser with the alignment marks is well known as exemplified by Sreenivasan et al. For example, Sreenivasan et al. teaches the use of cameras or imaging arrays or laser for proper positioning the alignment of the features (Figs. 117-19, 42 and 43, col.13. second paragraph and col.22, first paragraph). In view of the teaching of Sreenivasan et al., it would have been obvious to one of ordinary skill in the art to modify the optical alignment system of Chen by providing the optical device such as a camera or a laser with the alignment marks as taught by Sreenivasan et al. to improve the efficiency of positioning a stamp over a substrate to be patterned.

Conclusion

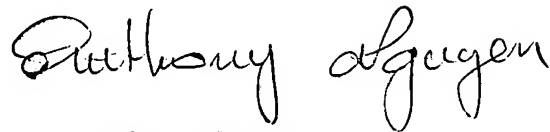
The patents to Tutt et al., Bailey et al., Dower et al., Guckel et al., Suda and Smith et al. are cited to show other structures and methods having obvious similarities to the claimed structure and method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169. The examiner can normally be reached daily from 9 AM to 5PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld, can be reached on (571) 272-2168.

The fax phone number for this Group is (571) 273-8300.

A handwritten signature in black ink that reads "Anthony Nguyen". The signature is written in a cursive, flowing style.

Anthony Nguyen
4/28/066
Patent Examiner
Technology Center 2800